

REMARKS

Objections Under 35 U.S.C. 132

In the Office Action, the amendment mailed July 2, 1996 was objected to under 35 U.S.C. 132 as introducing new matter into the disclosure. In particular, the introduction of an audio signal in the form of a square wave was considered material not supported by the original disclosure. The Action states that the Applicant is required to cancel the new matter in response to the Office Action.

As noted in the \$1.132 Declaration of Dr. Donald Moon, transmitting an audio signal in the form of a square wave, having a band of frequencies with a high end and a low end, through an audio circuit is a technique used in the electronic audio industry to determine the frequency response of the audio circuit. The frequency response can then be viewed on an oscilloscope. Such a technique can be used to describe the frequency response caused by an apparatus according to the present invention.

As noted in the \$1.132 Declaration of the co-inventor Arturo H. Garcia, such a square wave signal was transmitted through one channel of the audio circuit disclosed in Fig. 3 of the above identified patent application and the resulting frequency response curve viewed on an oscilloscope. Included with Mr. Garcia's \$1.132 Declaration are photocopies of two oscilloscope curves of the square wave signal before and after being transmitted through the audio circuit channel of Fig. 3 (i.e., Exhibits A and B, respectively).

Thus, the amendment regarding the use of a square wave does not introduce new matter because the described frequency response is inherent to the structure of the apparatus disclosed in the instant patent application. Accordingly, the \$132 objection should be withdrawn.

Rejections Under 35 U.S.C. 112, First Paragraph

In the Office Action, claims 32, 33 and 34 were rejected under 35 U.S.C. 112, first paragraph, as containing new matter (i.e., an input audio signal in the form of a square wave) which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As discussed above, the amendment regarding the use of a square wave does not introduce new matter. Even so, any reference to a square wave has been removed from the pending claims. Accordingly, this §112 rejection should be withdrawn.

Rejections Under 35 U.S.C. 112, Second Paragraph

Also in the present application, claims 17, 18, 29 and 39 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language and for being in omnibus claim form. It is respectfully submitted that there is nothing indefinite about claims 17, 18, 29 and 39.

Claims 17, 18, 29 and 39 are all dependent one claim 35 which recites a method of producing an enhanced electronic audio signal. Claim 17 recites a recording medium having at least one enhanced audio signal recorded thereon by the method of claim 15.

Claim 15 adds the step of recording the enhanced audio signal produced by the method of claim 35 onto a recording medium. Claim 18 further limits claim 17 by reciting that the recording medium of claim 17 is at least one of a magnetic recording medium and an optical recording medium. Therefore, claims 17 and 18 only include a recording medium that has an audio signal recorded thereon which was enhanced according to the method of claim 35. All other recording mediums, which do not have such an enhanced signal recorded thereon, are thereby excluded.

Claim 29 recites an electronic audio signal enhanced

according to the method of claim 35. Therefore, claim 29 only includes an audio signal which was enhanced according to the method of claim 35. All other audio signals, which have not been so enhanced, are excluded.

Finally, claim 39 recites sound produced from an audio signal enhanced according to the method as set forth in claim 35.

Therefore, claim 39 only includes sound produced from an audio signal enhanced according to the method of claim 35. All other sounds, which were not so produced, are excluded.

Accordingly, the \$112 rejection of claims 17, 18, 29 and 39 should be withdrawn.

Rejections Under 35 U.S.C. 102(b)

In the Office Action, claims 31 and 35 were rejected under 35 U.S.C. 102(b) as being anticipated ~~by Gauthier.~~

Gauthier discloses frequency characteristic shaping circuitry (i.e., a bipolar equalizer circuit) for permitting greater variations in developing a desired frequency characteristic of a hearing aid and also for permitting adaptation of a hearing aid to the loudness level of the sound picked up by the hearing aid. The Gauthier bipolar equalizer circuit includes a plurality of bandpass filters in which an audio signal is supplied and a plurality of variable gain attenuators are individually associated with the bandpass filters.

With regard to the method now recited in claim 35, Gauthier does not disclose a method of enhancing the quality of electronic audio signals by distorting the input audio signal such that frequencies in the input audio signal increase in amplitude as per increasing frequencies from a reference frequency up to an amplitude peak at a high frequency and, after the high frequency, decrease in amplitude as per increasing frequencies toward the high end. In addition, unlike the apparatus recited in claim 31, the Gauthier circuitry is not

operatively adapted such that when an input audio signal having a frequency band with a high end and a low end is transmitted therethrough, the input audio signal is distorted such that frequencies in the input audio signal increase in amplitude as per increasing frequencies from a reference frequency up to an amplitude peak at a high frequency and, after the high frequency, decrease in amplitude as per increasing frequencies toward the high end.

Therefore, because each and every element of the apparatus and method recited in claims 31 and 35, as amended, is not taught by Gauthier, Gauthier does not anticipate the invention of these claims. Accordingly, this §102 rejection should be withdrawn and the claims allowed.

Rejections Under 35 U.S.C. 103(a)

In the Office Action, claims 31-38, 14, 15, 17 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier. Except for the §103 rejection of claim 15, the Office Action provides no explanation why the other claims are obvious over Gauthier. An applicant can only respond to the reasons for rejection stated and the prior art cited in the Office Action.

In general, with regard to this §103 rejection, the above discussed amendments to claims 31 and 35 clearly distinguish the Gauthier teachings from the presently claimed invention. Gauthier does not disclose the present apparatus of claim 31 and does not teach or suggest the present method of claim 35. According, this §103 rejection should be withdrawn and the remaining claims 14, 15, 17, 18, 31, 33-35, 37 and 38 should be allowed.

With regard to claim 15, the Office Action states that even though Gauthier does not disclose recording the enhanced audio signal onto a recording medium, it would have been obvious

to have a recording medium as claimed because recording an audio signal for later use is well known in the art. It is agreed that the idea of recording an audio signal for later use, such as recording music for later listening, is well known. However, Gauthier only discloses his circuitry as being suitable for use in a hearing aid. Gauthier does not provide any teaching or suggestion that his circuitry would be suitable for use in a recording process. Without such a suggestion, one of ordinary skill in the art would not be motivated to use the Gauthier circuit for recording purposes.

What one of ordinary skill in the art might do with the teachings of the prior art is not dispositive when determining obviousness. In moving from the prior art to the claimed invention, one cannot base a determination of obviousness on what the skilled person might try or find obvious to try. Rather, the proper test requires determining what the prior art would have led the skilled person to do.

The CCPA, in In re Tomlinson, 363 F. 2d 928, 931, 150 USPQ 623, 626 (CCPA 1966), made this very clear when the court noted that "there is usually an element of 'obviousness to try' in any research endeavor, that it is not undertaken with complete blindness but rather with some semblance of a chance of success."

Permitting patentability determinations based on an "obvious to try" test "would not only be contrary to statute but result in a marked deterioration of the entire patent system as an incentive to invest in those efforts and attempts which go by the name of 'research.'" Id.

Therefore, it is respectfully submitted that the \$103 rejection of claim 15 was improper and should be withdrawn. Accordingly, claim 15 is allowable independent of the amendment to claim 35. In addition, since there is no other basis set forth in the Office Action for rejecting claim 15, and since claim 15 does not need the above amended language in claim 35 to overcome this \$103 rejection, it is submitted that any final

rejection made in a next patent Office Action would be premature and improper. See MPEP §§ 706.07(a)(c) and (d).

Allowable Subject Matter

In the Office Action, claims 2, 5, 9, 24 and 28 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants, through the undersigned, acknowledge and appreciate the Examiner's finding of allowable subject matter in claims 2, 5, 9, 24 and 28. However, in light of the above remarks, Applicants decline at this time to rewrite these claims in independent form, including all of the limitations of the base claim and any intervening claims.

Finally, in the Office Action, claim 12 was again found to be allowable over the prior art of record.

Canceled and New Claims

Claims 12, 32 and 36 have been canceled, without prejudice or disclaimer.

Claims 40-42 have been added in an effort to further define the scope of the present invention.

The subject application, as amended, more accurately discloses and claims the enhancing frequency response produced by the present invention. The enhancing effect that the present invention has on an electronic audio signal is inherent to the exemplary circuits disclosed in the instant specification. Therefore, the matter added by the above amendments is inherent to the structure disclosed in the instant application, as filed, and as such does not constitute new matter. Accordingly, it is submitted that the above amendments are in compliance with 37 CFR §1.118 and MPEP §608.04, and as such should be entered.

Until the present invention, electronic audio signals were not enhanced in this manner. The present invention is, thus, a pioneer invention. Because of its pioneering nature, it is submitted that the broad scope of protection being sought with the above amendments (i.e., the basic enhancing effect itself) is warranted.

CONCLUSION

For all of the foregoing reasons, it is respectfully submitted that the specification, the claims 2, 5, 9, 14, 15, 17, 18, 24, 28, 29, 31, 33-35, and 37-39, and new claims 40-42, are in full compliance with 35 USC §112, and, in view of the Office Action, are patentable over the art of record. Accordingly, it is submitted that this case is in condition for allowance and early notification of allowable subject matter is respectfully solicited. If however, after review of the present amendment, there are any issues left unresolved or if the Examiner otherwise believes that an interview with applicant's attorney would be appropriate or helpful, then the Examiner is requested to call the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

By Harold C. Knecht, III 4/21/97
Harold C. Knecht, III
Registration No. 35,576

P.O. Box 28338
St. Paul, MN 55128
Telephone: (612) 575-1056

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